# ULNAR COLLATERAL LIGAMENT (UCL) RECONSTRUCTION
## Physical Therapy Protocol

Patient Name: _____ Date of Surgery: _____

_____ **Evaluate and Treat** _____ **Provide patient with home exercise program**

**Frequency:** _____ x/week x _____ weeks

_____ **Phase I (0 - 6 Weeks):** ***Period of protection.*** Gradual progression of motion while protecting the reconstruction. Hinged elbow brace should be worn during sleep and in public places. Avoid any valgus loading of elbow until 3 months post-op.***

**Weeks 0-2:** Goals = wound healing, pain control, minimize atrophy; formal therapy to start ~2 weeks postop.

- **Splint/Brace:** Immobilization in plaster splint/sling with wrist free → converted to hinged elbow brace (allowing ROM 45 to 90°) at 1 week visit. Brace should be worn at all times.
- **ROM:** Patients encouraged to perform flexion/extension of wrist without excessive forearm pronation. Once brace is applied, patients may begin AROM as tolerated 45-90° with brace on. A+PROM knee as tolerated (graft harvest site).
- **Strengthening:** Shoulder/biceps isometrics. ***Avoid valgus loading of elbow.***

**Weeks 2-4:**

- **Brace:** Hinged elbow brace should be worn at night and in public places; may be removed for therapy and hygiene. ROM settings should be adjusted to allow whatever maximum amount of extension is achieved during therapy, with flexion limited to 90°.
- **ROM:** Advance AROM elbow, progressing as tolerated. Avoid aggressive passive stretching in flexion unless patient is not progressing. Avoid aggressive passive stretching in extension until after 4 weeks. Goal: 0-120 by 4 weeks postop.
- **Strengthening:** Cuff and periscapular strengthening. ***Avoid valgus loading of elbow.*** May begin knee strengthening as tolerated.

**Weeks 4-5:**

- **Brace:** Hinged elbow brace should be worn at night only, and gradually discontinued by 6 weeks. ROM settings should be 0-90°.
- **ROM:** Advance AROM as tolerated. If full extension is not achieved by 4 weeks, add soft-tissue mobilization with low-load, long-duration passive stretches. If 120° of flexion not achieved by 4 weeks, add low-load, long-duration passive stretching in flexion. Goal: 0-140 by 6 weeks postop.
- **Strengthening:** Grip strengthening, cuff and periscapular strengthening. ***Avoid valgus loading of elbow.***

_____ **Phase II (6 - 16 Weeks):** ***Advance strengthening.***

- **ROM:** Advance A+PROM to full, if not achieved. Aggressive stretching at end-ranges to advance to full.
- **Strengthening:** Begin gentle, resisted cuff/periscapular strengthening and add in elbow and wrist flexion/extension. May transition into closed-chain exercises and incorporate overall body conditioning (if not already begun): running, elliptical, stationary bike. ***Avoid valgus loading of the elbow until after 3 months.***

_____ **Phase III (4-12 Months):** ***Begin more sport-focused conditioning. Graduated return to throwing as detailed below. Flare-ups of pain are common (most commonly secondary to throwing too hard), and should be addressed with several days of rest, followed by resumption of therapy once pain has resolved.***

- **Month 4:** PT one time every 3-4 weeks. Start throwing at 45 ft for 10 min (3-4 times per week with rest day between), throwing just hard enough to reach the target. There should be a slight arc on the ball. Warm-up is included in the allotted time. Emphasis on proper follow-through at ball release and hitting specific targets when throwing. Hitting can be started for 10-15 minutes off the tee, gradually progressing in intensity.
- **Month 5:** PT one time every 3-4 weeks. Increase throwing to 60 ft for 10-15 min (3x/week); Start hitting soft-toss for 10-15 min (3x/week).
- **Month 6:** PT one time every 3-4 weeks. Advance to throwing from 120 ft for 15 min (3x/week) as follows:
  - **1st week:** throwing at 60 ft for 15 min.
  - **2nd and 3rd weeks:** throwing at 90 ft for 15 min; once this is achieved, consider videotape of throwing mechanics.
  - **4th week:** throwing at 120 ft for 15 min.
- **Months 7-8:** Sport-specific return to throwing programs *(see Ortho Carolina Pitcher and Fielder return to throwing program).*
- **Months 9-12:** Gradual release to competition if successful completion of throwing program.

_____ **Other:**

____ Modalities ____ Electrical Stimulation ____ Ultrasound

____ Heat before/after ____ Ice before/after exercise

By signing this referral, I certify that I have examined this patient and physical therapy is medically necessary.
This patient _____ would _____ would not benefit from social services.

Physician Name: _____ Date: _____

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